SAMSUNG

User Manual

WS-Stand

The color and the appearance may differ depending on the product, and the specifications are subject to change without prior notice to improve the performance.

BN46-00204C-03

Copyright

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- An administration fee may be charged if either
  - (a) an engineer is called out at your request and there is no defect in the product (i.e. where you have failed to read this user manual).
  - (b) you bring the unit to a repair centre and there is no defect in the product (i.e. where you have failed to read this user manual).
- The amount of such administration charge will be advised to you before any work or home visit is carried out.

Icons used in this manual

	The following images are for reference only. Real-life situations may differ from what is shown in the images.

Symbols for safety precautions

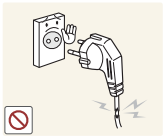
Warning	A serious or fatal injury may result if instructions are not followed.
Caution	Personal injury or damage to properties may result if instructions are not followed.
	Activities marked by this symbol are prohibited.
	Instructions marked by this symbol must be followed.

Safety Precautions

The monitor images in this manual are for reference only. Monitor is sold separately.

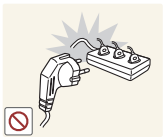
Electricity and Safety

Warning



Do not use a damaged power cable or plug, or a loose power socket.

- An electric shock or fire may result.

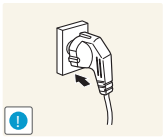


Do not plug many products into the same power socket.

- Otherwise, the socket may overheat and cause a fire.

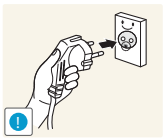
Do not touch the power cable with wet hands.

- Otherwise, an electric shock may result.



Insert the power cable all the way in so it is not loose.

- An unstable connection may cause a fire.



Ensure you connect the power cable to a grounded power socket. (type 1 insulated devices only).

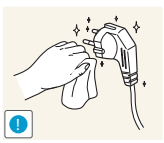
- An electric shock or injury may result.

Do not bend or pull the power cable with force. Do not weigh the power cable down with a heavy object.

- A damaged power cord may cause an electric shock or fire.

Do not place the power cable or product near heat sources.

- An electric shock or fire may result.



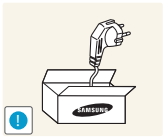
If the power cable pins or power outlet is covered with a foreign substance (dust, etc.), wipe it off using a dry cloth.

- Otherwise, a fire may result.

Caution

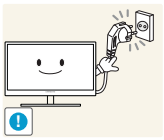
Do not unplug the power cable when the product is in use.

- The product may become damaged by an electric shock.



Do not use the power cable for products other than authorized products supplied by Samsung.

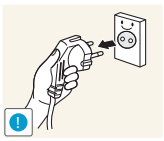
- An electric shock or fire may result.



Keep the power socket where the power cable is connected unobstructed.

- If any problem occurs in the product, unplug the power cable to completely cut the power to the product.

  Power to the product cannot be completely cut off with the power switch.



Hold the plug when disconnecting the power cable from the power socket.

- An electric shock or fire may result.

Installation and Safety

Warning

DO NOT PLACE CANDLES, INSECT REPELLANTS OR CIGARETTES ON TOP OF THE PRODUCT. DO NOT INSTALL THE PRODUCT NEAR HEAT SOURCES.

- Otherwise, a fire may result.

Avoid installing the product in a narrow space with bad ventilation, such as a bookshelf or wall closet.

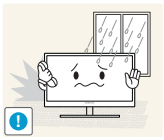
- Otherwise, a fire may result due to an increased internal temperature.

Keep the plastic packaging bag for the product in a place that cannot be reached by children.

- Children may suffocate.

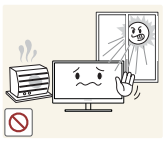
Do not install the product on an unstable or vibrating surface (insecure shelf, sloped surface, etc.).

- The product may fall and break or cause a personal injury.
- Using the product in an area with excess vibration may damage the product or cause a fire.



Do not install the product in a vehicle or a place exposed to dust, moisture (water drips, etc.), oil, or smoke.

- An electric shock or fire may result.



Do not expose the product to direct sunlight, heat, or a hot object such as a stove.

- Otherwise, the product lifespan may be reduced, or a fire may result.

Do not install the product within the reach of young children.

- The product may fall and injure children.

Edible oil, such as soybean oil, can damage or deform the product. Do not install the product in a kitchen or near a kitchen counter.

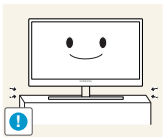
Caution

Take care not to drop the product when moving it.

- Otherwise, product failure or personal injury may result.

When installing the product on a cabinet or shelf, make sure that the bottom edge of the front of the product is not protruding.

- The product may fall and break or cause a personal injury.
- Install the product only on cabinets or shelves of the right size.



Put down the product carefully.

- The product may fall and break or cause a personal injury.

Installing the product in an unusual place (a place exposed to a lot of fine particles, chemical substances or extreme temperatures, or an airport or train station where the product should operate continuously for an extended period of time) may seriously affect its performance.

- Be sure to consult Samsung Customer Service Center (page 42) before installation if you want to install the product at such a place.

Operation and Safety

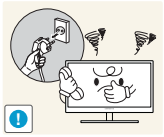
Warning

High voltage runs through the product. Do not attempt to disassemble, repair, or modify the product on your own.

- An electric shock or fire may result.
- Contact Samsung Customer Service Center (page 42) for repair.

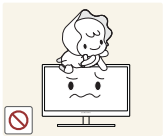
Before moving the product, turn off the power switch and disconnect the power cable and all other connected cables.

- Otherwise, the power cord may be damaged and a fire or electric shock may result.



If the product generates a strange noise, a burning smell, or smoke, remove the power cable immediately and contact Samsung Customer Service Center (page 42).

- An electric shock or fire may result.



Do not let children hang from the product or climb on top of it.

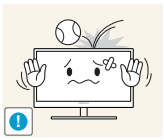
- The product may fall, and your child may become injured or seriously harmed.

If the product falls or the exterior is damaged, power off the product, remove the power cable, and contact Samsung Customer Service Center (page 42).

- Otherwise, an electric shock or fire may result.

Do not put a heavy object, toy, or sweets on top of the product.

- The product or heavy objects may fall as children try to reach for the toy or sweets resulting in a serious injury.

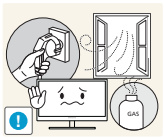


Do not drop objects on the product or apply impact.

- An electric shock or fire may result.

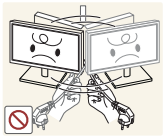
Do not move the product by pulling the power cable or any cable.

- Otherwise, the cable may be damaged and product failure, an electric shock or fire may result.



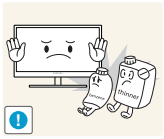
If a gas leakage is found, do not touch the product or power cable. Also, ventilate the area immediately.

- Sparks can cause an explosion or fire.



Do not lift or move the product by pulling the power cable or any cable.

- Otherwise, the cable may be damaged and product failure, an electric shock or fire may result.



Do not use or keep combustible spray or an inflammable substance near the product.

- An explosion or fire may result.

Ensure the vents are not blocked by tablecloths or curtains.

- Otherwise, a fire may result from an increased internal temperature.

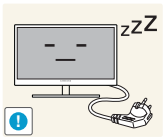
Do not insert a metallic object (a chopstick, coin, hair pin, etc.) or inflammable object (paper, match, etc.) into the vent or ports of the product.

- If water or any foreign substance enters the product, be sure to power off the product, remove the power cable, and contact Samsung Customer Service Center (page 42).
- Product failure, an electric shock or fire may result.

Do not place objects containing liquid (vases, pots, bottles, etc) or metallic objects on top of the product.

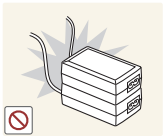
- If water or any foreign substance enters the product, be sure to power off the product, remove the power cable, and contact Samsung Customer Service Center (page 42).
- Product failure, an electric shock or fire may result.

Caution



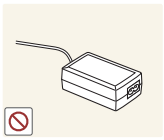
Disconnect the power cable from the power socket if you do not plan on using the product for an extended period of time (vacation, etc.).

- Otherwise, a fire may result from accumulated dust, overheating, an electric shock, or electric leakage.



Do not put DC power adapters together.

- Otherwise, a fire may result.



Remove the plastic bag from the DC power adapter before you use it.

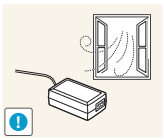
- Otherwise, a fire may result.

Do not let water enter the DC power adapter or get the adapter wet.

- An electric shock or fire may result.
- Avoid using the product outdoors where it can be exposed to rain or snow.
- Be careful not to get the DC power adapter wet when you wash the floor.

Do not put the DC power adapter near to any heating apparatus.

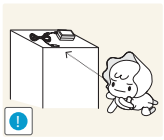
- Otherwise, a fire may result.



Keep the DC power adapter in a well-ventilated area.

Do not use humidifiers or stoves around the product.

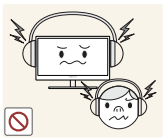
- An electric shock or fire may result.



Store the small accessories used with the product out of reach of children.

Do not place heavy objects on the product.

- Product failure or personal injure may result.



Do not increase the volume too high when using headphones (earphones).

- Sound particularly at a higher volume could potentially affect long-term hearing.

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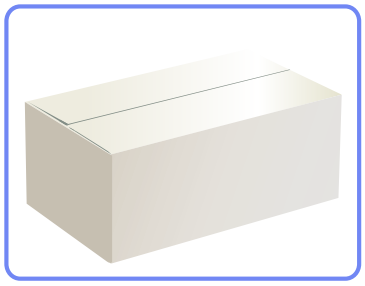
1 Preparations

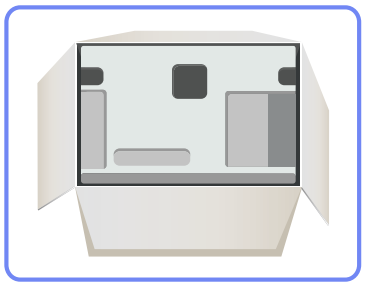
1.1 Checking the Contents

1.1.1 Removing the Packaging

1 Open the packaging box. Be careful not to damage the product when you open the packaging with a sharp instrument.



2 Remove the styrofoam from the product.



3 Check the components and remove the styrofoam and plastic bag.

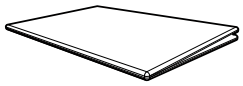
- The appearance of actual components may differ from the image shown.
- This image is for reference only.

4 Store the box in a dry area so that it can be used when moving the product in the future.

1.1.2 Checking the Components

- Contact the dealer from whom you purchased the product if any item is missing.
- The appearance of the components and items sold separately may differ from the image shown.

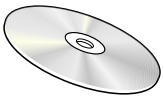
Components



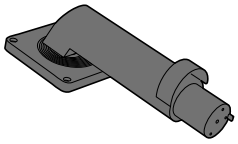
Quick setup guide

Warranty card

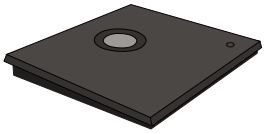
(Not available in some locations)



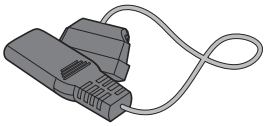
User manual



Stand connector



Stand base



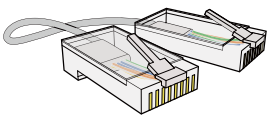
Power cable

DC power adapter

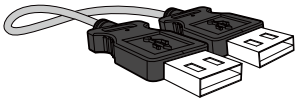
- Components may vary depending on the country.
- The stand base supplied with this product contains a circuit board. Care should be taken when handling the base.

Items sold separately

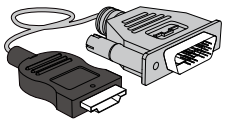
The following items can be purchased at your nearest retailer.



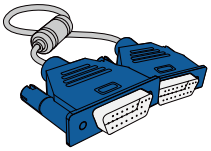
LAN cable



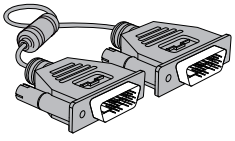
USB cable



HDMI-DVI cable



D-SUB cable

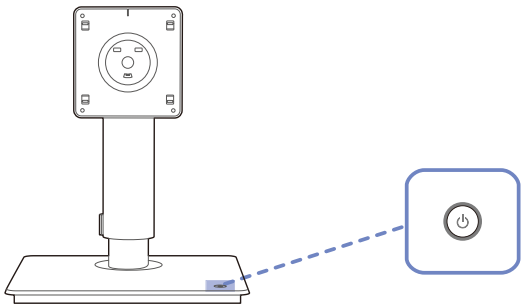


DVI cable

1.2 Parts

1.2.1 Button

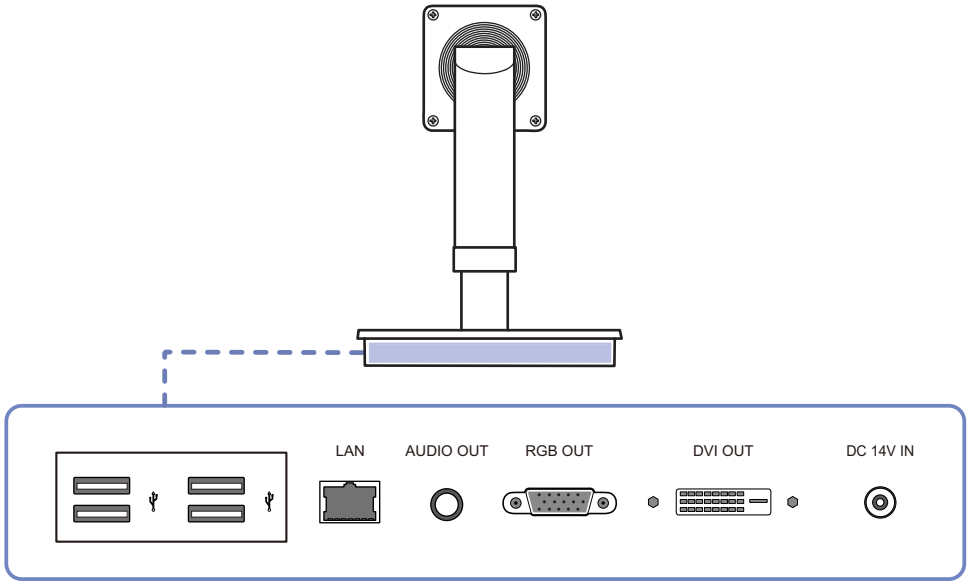
The color and shape of parts may differ from what is shown. Specifications are subject to change without notice to improve quality.



Icons	Description
⏻	Power on or off the product.

1.2.2 Reverse Side

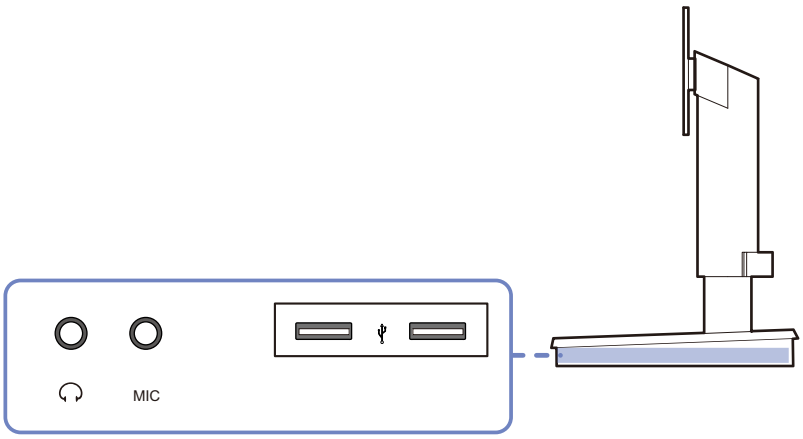
The color and shape of parts may differ from what is shown. Specifications are subject to change without notice to improve quality.



Port	Description
	Connect to a USB device.
	Connect to a network using the LAN cable.
	Connect to an audio output device such as headphones.
	Connect to the monitor using the D-SUB cable.
	Connect to the monitor using the DVI cable.
[DC 14V IN]	Connect to the DC power adapter.

1.2.3 Right Side View

The color and shape of parts may differ from what is shown. Specifications are subject to change without notice to improve quality.

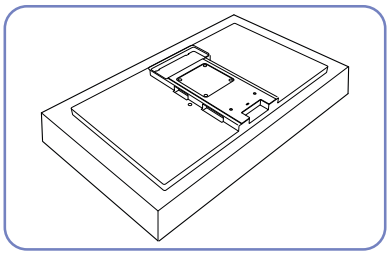


Port	Description
[ ]	Connect to an audio output device such as headphones.
[MIC]	Connect to a microphone.
	Connect to a USB device.

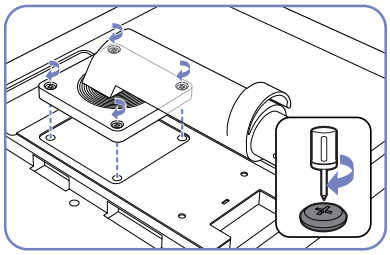
1.3 Installation

1.3.1 Reassembly

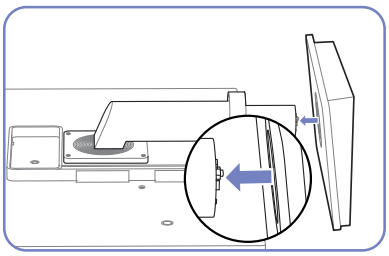
Ensure the monitor that will be connected to the stand complies with VESA standards.



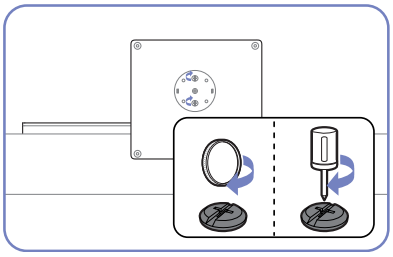
Prepare a monitor that will be connected to the stand. Put a protective cloth or cushion on a flat surface. Next, place the monitor facing down onto the cloth or cushion.



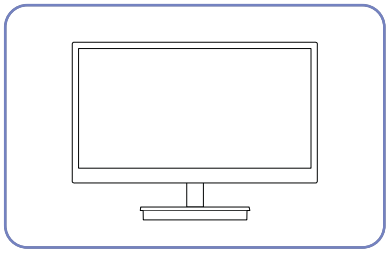
Align the grooves on the monitor to the grooves on the stand connector. Then, fasten with screws.



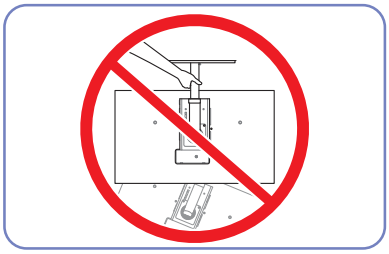
Insert the stand base into the stand in the direction of the arrow.



Fasten the screw tightly (using a screwdriver or coin) into the bottom of the stand base.



After installing the stand, place the product upright.



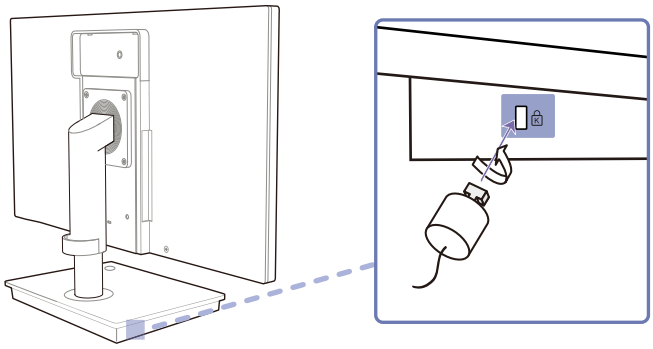
- Caution

Do not hold the product upside down only by the stand.

- The color and shape of parts may differ from what is shown. Specifications are subject to change without notice to improve quality.
- The monitor images in this manual are for reference only. Monitor is sold separately.
- Using screws longer than the supplied screws may cause internal product damage.
- Do not use a monitor or screw that does not comply with VESA standards. Also, do not use excessive force when attaching the stand to the monitor. The product may get damaged or fall and cause personal injury. Samsung shall not be held liable for any damage or injury caused by using improper screws or attaching the wall-mount kit or desktop stand using excessive force.
- VESA standards support 100 x 100mm only.

1.3.2 Anti-theft Lock

An anti-theft lock allows you to use the product securely even in public places. The locking device shape and locking method depend on the manufacturer. Refer to the user guide provided with your anti-theft locking device for details. The lock device is sold separately.



To lock an anti-theft locking device:

1. Fix the cable of your anti-theft locking device to a heavy object such as a desk.
2. Put one end of the cable through the loop on the other end.
3. Insert the locking device into the anti-theft lock slot at the back of the product.
4. Lock the locking device.

- An anti-theft locking device can be purchased separately.
- Refer to the user guide provided with your anti-theft locking device for details.
- Anti-theft locking devices can be purchased at electronics retailers or online.
- The monitor images in this manual are for reference only. Monitor is sold separately.

2 Using "Windows Embedded Standard 2009"

2.1 What is "Windows Embedded Standard 2009" Client?

The **Microsoft Windows Embedded Standard 2009 (WES2009)** client uses the **Microsoft Windows Embedded Standard 2009 OS**. When the WES client is connected to a server where **Citrix XenDesktop** or **VMWare View Client**, **Microsoft Remote Desktop Connection** service is available, the keyboard, mouse, audio/video, and display data will be forwarded to the client through the network between the client and server.

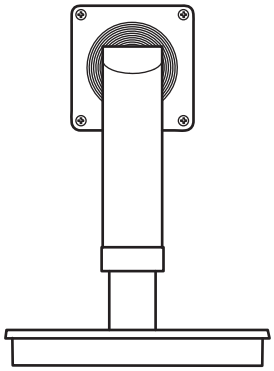
Connectable Servers

- A **XenDesktop** Server
  - **Microsoft Windows 2000/2003/2008** Server where the **Terminal Service** and **Citrix XenServer** are installed
- A **VMWare View Client** Server
  - **Microsoft Windows 2000/2003/2008** Server where the **Terminal Service** and **VMWare Server** are installed
- A **Microsoft RDP (Remote Desktop Protocol)** Server
  - **Microsoft Windows 2000/2003/2008** Server where the **Terminal Services** are installed
  - **Microsoft Windows XP Professional**

This manual describes the functions provided by the **WES** Client. However, it does not explain general functionalities of **WES**. For more general information on **Windows XP**, refer to Windows XP Help provided by **Microsoft**.

2.2 Connection to Use "Windows Embedded Standard 2009"

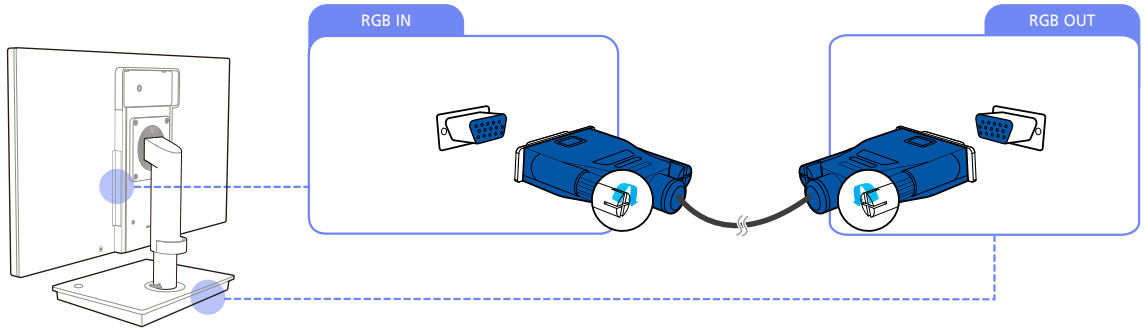
2.2.1 Before Connecting



Pre-connection Checkpoints

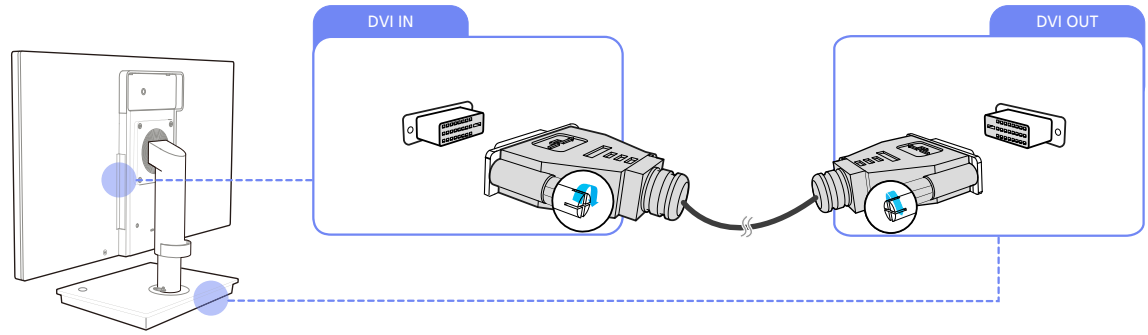
- Before connecting a source device, read the user manual provided with it.
  The number and locations of ports on source devices may differ from device to device.
- Do not connect the power cable until all connections are completed.
  Connecting the power cable during connection may damage the product.
- Check the types of ports at the back of the product you want to connect.
- The port names may vary depending on the monitor.
- For details on how to change the input source for your monitor, refer to the monitor user manual.

2.2.2 Connection Using the D-SUB Cable (Analogue Type)



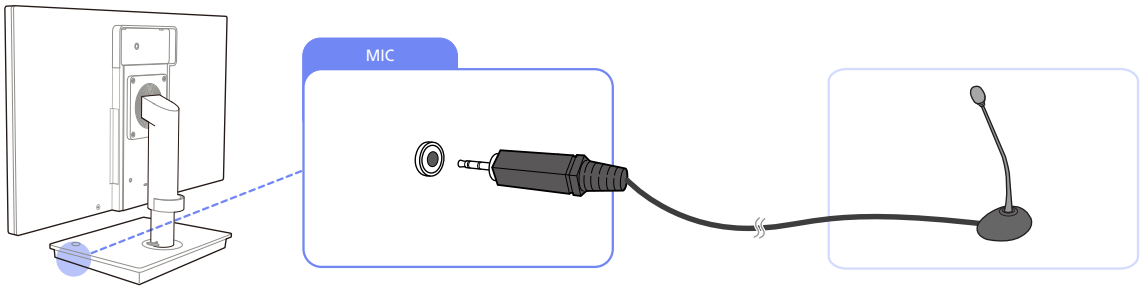
1 Connect the D-SUB cable to [RGB IN] on the back of the monitor and [RGB OUT] on the stand base.

2.2.3 Connection Using the DVI Cable



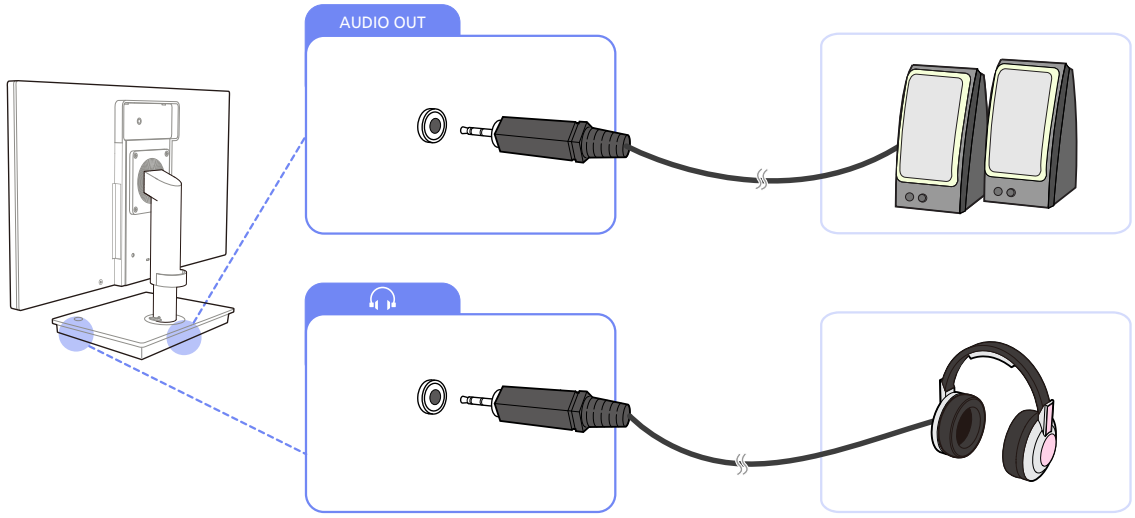
1 Connect the DVI cable to [DVI IN] on the back of the monitor and [DVI OUT] on the stand base.

2.2.4 Connecting a Microphone



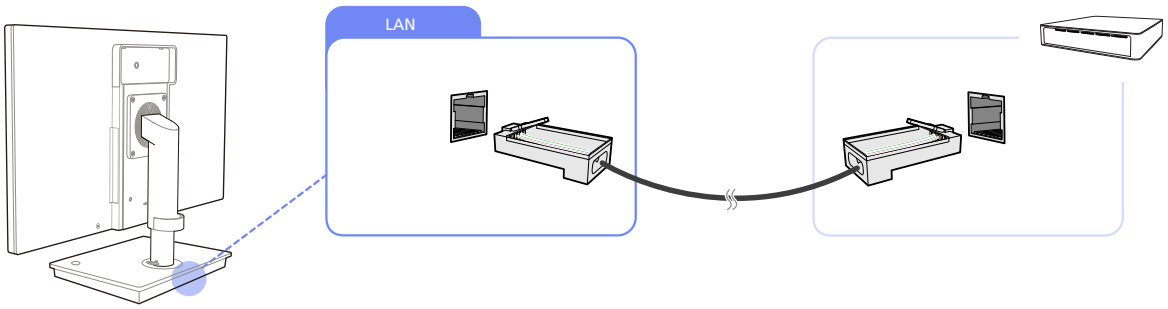
1 Connect the microphone to [MIC] on the right side of the stand base.

2.2.5 Connecting to Headphones or Speakers



1 Connect an audio output device (headphones or speakers) to [AUDIO OUT] on the back or [ ] on the right side of the stand base.

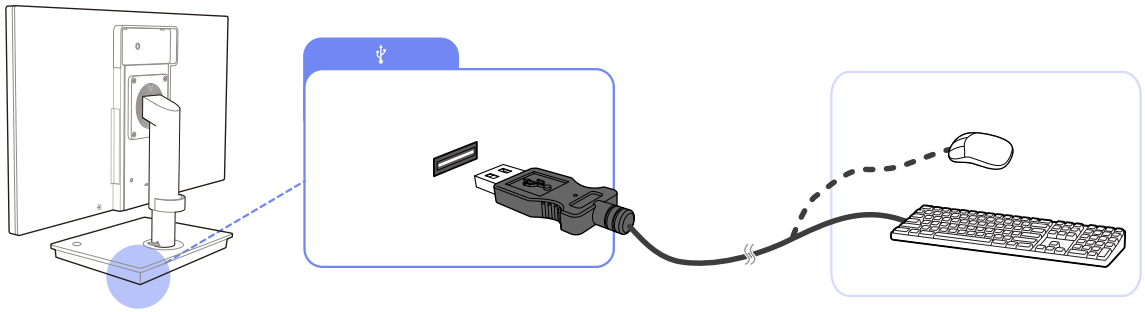
2.2.6 LAN Connection



1 Connect the LAN cable to [LAN] on the back of the stand base.

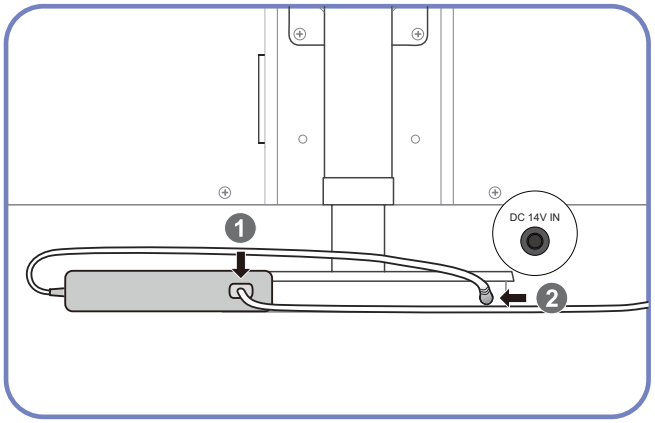
It is not supported when the network speed is below or equal to 10Mbps.

2.2.7 Connecting USB Devices

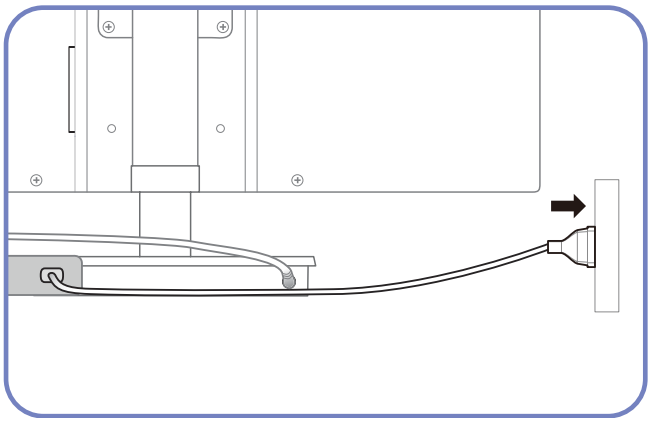


1 Connect USB devices (keyboard, mouse, etc.) to [ψ] on the back or right side of the stand base.

2.2.8 Connecting the Power



Connect the power cable to the DC power adapter. Next, connect the DC power adapter to [DC 14V IN] on the stand base.



Plug in the power cable to the power socket.

- The color and shape of parts may differ from what is shown. Specifications are subject to change without notice to improve quality.
- The monitor images in this manual are for reference only. Monitor is sold separately.
- For details on how to connect the power cable to the monitor, refer to the monitor user manual.

2.3 Using "Windows Embedded Standard 2009"

2.3.1 Logon

When the client starts, you can logon to the server by entering your username and password. The default account IDs are **Administrator** and **MyUser**. The corresponding passwords are not set.

2.3.2 "Windows Embedded Standard 2009" Desktop

MyUser

When you log in, the **MyUser** Desktop appears. The default icons that appear on the **MyUser** Desktop are **My Documents**, **My Computer**, **My Network Places**, **Citrix Online Plugin**, **VMWare View Client**, **Remote Desktop Connection**, **Internet Explorer** and **Recycle Bin**. You can also run this connection from the **Start** menu. The audio volume icon and system time are displayed on the **MyUser** Taskbar.

When logged on as a **MyUser**, there are many restrictions that protect the system from incorrect user actions. You cannot access the system drives and there are restrictions on configuring properties for them. To configure the client's advanced and detailed settings, log on as an **Administrator**.

Administrator

If you logon as **Administrator**, the **Administrator** Desktop appears. The default icons that appear on the **Administrator** Desktop are **My Documents**, **My Computer**, **My Network Places**, **Citrix Online Plugin**, **VMWare View Client**, **Remote Desktop Connection**, **Internet Explorer** and **Recycle Bin**. You can also run the **Citrix Online Plugin**, **VMWare View Client**, **Remote Desktop Connection** and **Internet Explorer** from the **Start** menu. The audio volume icon, VNC server icon, Enhanced Write Filter status icon, and system time are displayed on the **Administrator** Taskbar. The **Administrator** privilege is required for adding and removing programs.

Log off, Restart, Shut down

- To log off the current session, shut down or restart your client, use the **Start** menu. [**Start** → **Shut down**]. The **Shut Down** Windows dialog box is displayed. Select an operation from the combo box and click OK. You can also log off or shut down your client using the Windows Security dialog box displayed when pressing the [**Ctrl** + **Alt** + **Del**] keys. If '**Force Auto Log on**' is activated, you will be immediately logged on after each log off.
- The Client **Log off**, **Restart** and **Shut down** take effect on the operations of the EWF (Enhanced Write Filter). To keep the changed system configuration, you must save a cache for the current system session into flash memory. Failing to do so will cause the changed configuration to be lost when the client is shutdown or restarted. (In the case of logging off, the configuration is remembered when loggin in again.) For more information on the **Enhanced Write Filter**, refer to the Program Help.

2.3.3 Programs

Remote Desktop Connection

You can control a running terminal server or another computer (**Windows 95** or later) remotely through a remote desktop connection.

- **Remote Desktop**
  - **Windows XP Professional** or **Windows 2000/2003/2008** Server must be installed on the computer to be controlled remotely. This computer is called a host.
  - A remote computer running on an operating system later than **Windows 95** is required. This remote computer is called a client. The client software for the remote desktop connection must be installed on the client.
  - You must also be connected to the Internet. A broadband Internet connection is good for high performance. However, because the remote desktop transmits a minimum set of data including the display data and keyboard data to control the host remotely, a broadband Internet connection is not required. You can run a remote desktop on a low bandwidth Internet connection.

  When running a remote desktop on **Windows XP Professional**, you cannot use the operating system of your computer.

- **Enabling Your Computer as the Host**

  You must enable the **Remote Desktop** feature to control it from another computer. You must be logged on as an **Administrator** or a member of the **Administrators group** to enable **Remote Desktop** on your computer. Follow these steps:

  1. Open the System folder in the Control Panel. Click **Start**, point to **Settings**, click **Control Panel**, and then double-click the System icon.
  2. On the Remote tab, select the **Allow users to connect remotely to this computer** checkbox.
  3. Ensure that you have the proper permissions to connect to your computer remotely, and click **OK**.
  4. Leave your computer running and connected to the client's network with Internet access.

System Properties
General
Computer Name
Hardware
Advanced
Automatic Updates
Remote
Select the ways that this computer can be used from another location.
Remote Assistance
Allow Remote Assistance invitations to be sent from this computer
What is Remote Assistance?
Advanced...
Remote Desktop
Allow users to connect remotely to this computer
Full computer name:
OEM-M2LZQIHOJ81
What is Remote Desktop?
Select Remote Users...
For users to connect remotely to this computer, the user account must have a password.
Windows Firewall will be configured to allow Remote Desktop connections to this computer.
OK
Cancel
Apply

- Start a Remote Desktop Session on the Client

  Once you have enabled your host computer to allow remote connections and installed the client software on a Windows-based client computer, you are ready to start a **Remote Desktop** session.

  You must first establish a virtual private network connection or remote access service connection from your client computer to your host computer.

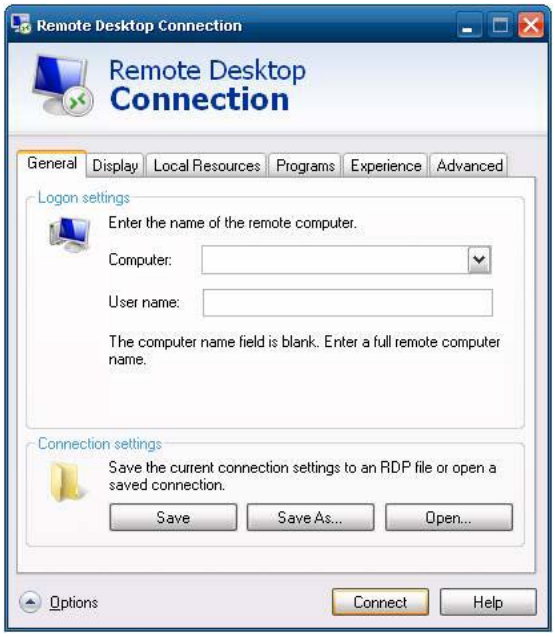
  1 Click **Start**, point to **Programs**, and then click **Remote Desktop Connection**. Or double-click the **Remote Desktop Connection** icon. The **Remote Desktop Connection** window will open.

  2 Enter the host computer name. You can configure detailed settings by clicking the **Options** button.

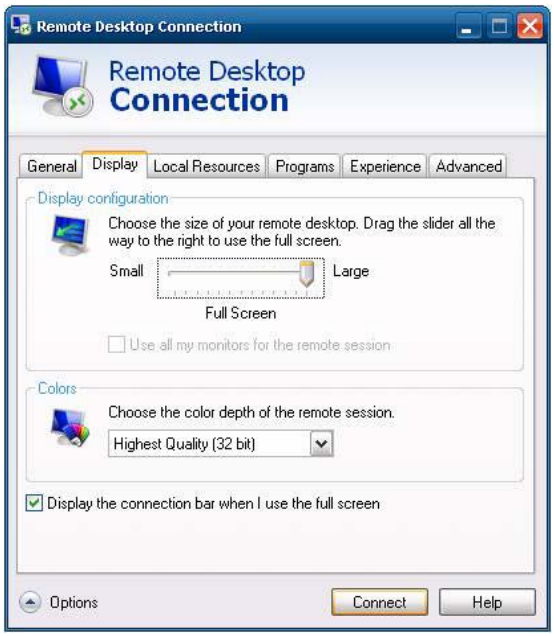
The Help file is not available with this Monitor.

3 Options

- **General** : Enter the login information to connect to the host computer. Enter your username and password to login to the host automatically.

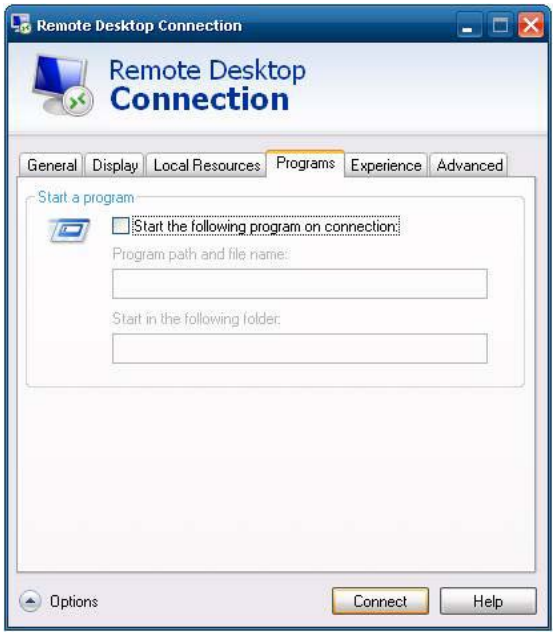


- **Display** : The **Remote Desktop Connection** sends and receives compressed screen data. If you set the resolution and color quality to the high option, the speed may become slow.

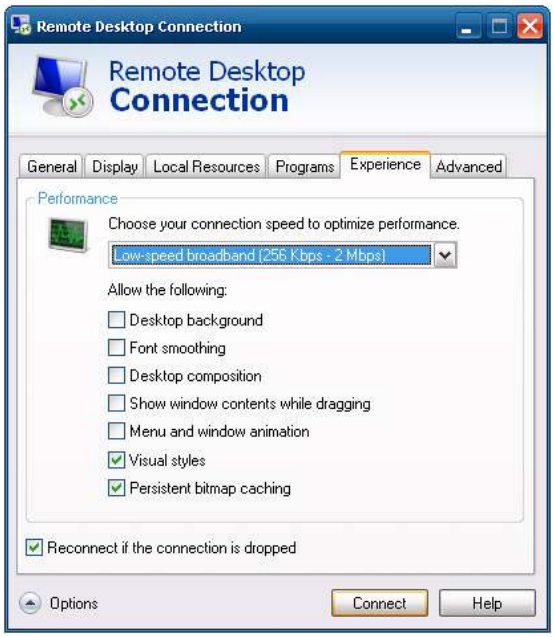


- **Local Resource** : Specify whether to use the hard disks and ports.

- **Programs** : Select an application and specify the folder where you want to run the application when a connection is established to the host PC.



- **Experience** : You can select your connection speed, and select and share environmental options.



- **Advanced** : Protect your personal information for when your monitor is connected to a remote desktop.

Remote Desktop Connection
Remote Desktop Connection
General
Display
Local Resources
Programs
Experience
Advanced
Server authentication
Server authentication verifies that you are connecting to the intended remote computer. The strength of the verification required to connect is determined by your system security policy.
If the actual verification does not meet minimum policy requirements:
Warn me
What are my server authentication options?
Connect from anywhere
Configure settings to connect through Remote Desktop Gateway when I am working remotely.
Settings...
Options
Connect
Help

4 Click **Connect**. The Log On to Windows dialog box appears.

5 In the “Log On to Windows” dialog box, type your username, password, and domain (if required), and then click **OK**. The **Remote Desktop** window will open and you will see the desktop settings, files, and programs that are on the host computer.

For more information on **Remote Desktop Connections**, visit the **Microsoft** web site.

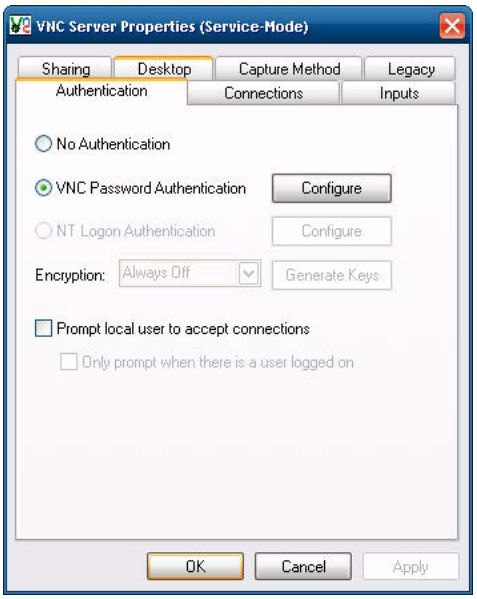
RealVNC Server

RealVNC (Virtual Network Computing) is a software program that allows you to connect to another computer on a network and control it remotely. Compared to the Windows terminal service which has a similar function, **RealVNC** allows only one administrator to connect to the server at a time. That is, if another is connected to the server as an administrator, the previous administrator connection will be disconnected.

In **RealVNC**, the server and the viewer communicate via the **VNC** protocol. You must install a **RealVNC** server on the computer you wish to control remotely, and a **VNC** viewer on the computer which remotely controls the computer where the **RealVNC** server is installed. Hence, the **RealVNC** server program is installed on a **WES** client.

By using this program, you do not have to move directly to the client site to resolve its problems. Instead, you can connect to the client from the server and solve problems remotely. For this reason, **RealVNC** is being used.

Only **Administrator** can configure the **RealVNC** server properties. To display the configuration dialog box for **RealVNC**, double-click the **RealVNC** icon in the system tray. From this dialog box, you can run a **VNC** server and configure a password and various properties. The default password is set to **Administrator**. Note that it is case-sensitive.



Internet Explorer

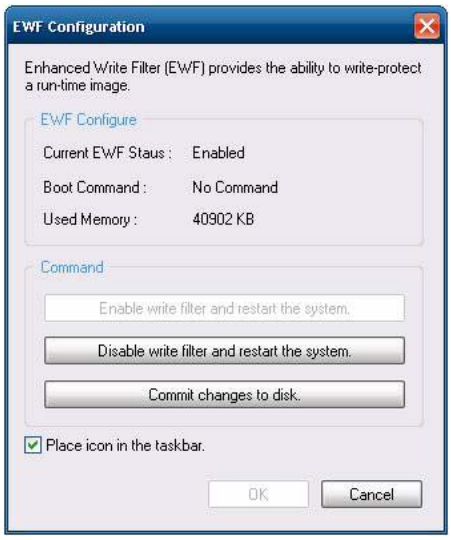
A **WES** Client includes **Internet Explorer**. This program is permitted for all users. **Microsoft** website.

For more information on Internet Explorer, visit the Microsoft website.

Enhanced Write Filter (EWF)

Enhanced Write Filter (EWF) protects a flash volume from write access and consequently, preserves the durability of the flash device. **EWF** provides read and write access through a cache to the client instead of allowing direct access to a flash volume.

If **EWF** is activated, data is not stored to the flash. The data stored in the cache is only effective while the client is operating. The cached data will be lost when restarting or shutting down your client. Therefore, to store the data written to the registry, favorites and cookie folders, etc., the content stored in the cache should be transferred to the flash. An error message is displayed when it is not possible to write to the cache due to a lack of memory. If this message is displayed, you have to deactivate **EWF** to flush the **EWF** cache. The user can double-click the **EWF** icon on the tray at the bottom right of the screen to call the **EWF** Manager. A user can also change the **EWF** configuration by entering **EWF** management commands at the command prompt. This task requires the **Administrator** privilege.


EWF Configuration
Enhanced Write Filter (EWF) provides the ability to write-protect a run-time image.
EWF Configure
Current EWF Staus : Enabled
Boot Command : No Command
Used Memory : 40902 KB
Command
Enable write filter and restart the system.
Disable write filter and restart the system.
Commit changes to disk.
Place icon in the taskbar.
OK
Cancel

- **Enable write filter and restart the system.**

  If the **EWF** is disabled, enable it. If this item is selected, the cache is flushed and the **EWF** is enabled. After restarting your computer, the configurations and file system information for the client are written to a cache. You can also perform this operation by entering "**ewfmgr.exe c: -enable**" at the command prompt and restarting your computer.

- **Disable write filter and restart the systems.**

  This item is activated when the **EWF** is running. If this item is selected, the current states of the client (saved in a cache) are saved to a flash volume and the **EWF** is disabled. After restarting your computer, the configurations and file system information for the client are written to a flash volume. You can also perform this operation by entering "**ewfmgr.exe c: -commitanddisable**" at the command prompt and restarting your computer.

- **Commit changes to disk.**

  This item is activated when the **EWF** is running. If this item is selected, the current states of the client (saved in a cache) are saved to a flash volume. However, the state of **EWF** will not be changed. You can also perform this operation by entering "**ewfmgr.exe c: -commit**" at the command prompt.

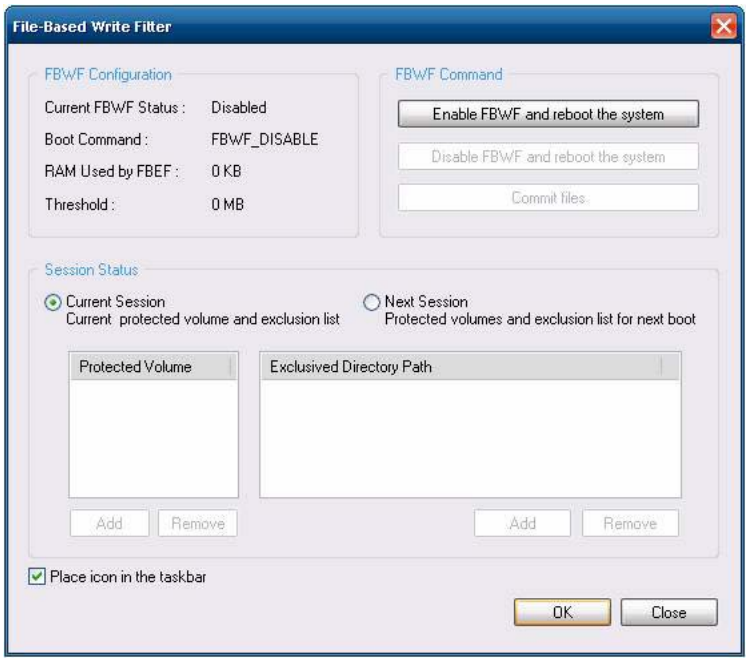
You can view the configurations for the protected volumes by entering “**ewfmgr.exe c:**” at the command prompt.

File-Based Write Filter (FBWF)

The **File-Based Write Filter (FBWF)** protects the memory of the client from being overwritten by any unauthorized user. By restricting excessive writing into the memory, the **FBWF** allows you to use the client for a long time. If you request I/O, the **FBWF** has the client perform its operations using the cache instead of the memory so that the memory can be protected.

The data saved in the cache is preserved while the client operates normally. It is removed when it is restarted or exited. To save the changes, you should write the relevant file onto the disk using the commit command. If you don’t know which file is changed, disable the **FBWF**, change it, and enable it again.

You can control the **FBWF** using the various options of the command at a command prompt.



- **FBWF Configuration**
  - **Current FBWF status** : Displays the current status of the **FBWF (Enabled or Disabled)**.
  - **Boot command** : Displays the **FBWF** command that will be performed at the next boot-up.
  - **RAM Used by FBEF** : Displays the size of the RAM the **FBWF** is using. If the current status is set to "**Disabled**", the used memory is displayed as 0 KB.
  - **Threshold** : Displays the maximum size of the RAM that the **FBWF** can use.
- **FBWF Command**
  - **Enable the FBWF and reboot the system** : Enables the disabled **FBWF** and restarts the client. If the client is not restarted, only the boot command is changed to BWF_ENABLE and the current status is not changed.

- **Disable the FBWF and reboot the system** : Disables the enabled **FBWF** and restarts the client. If the client is not restarted, only the boot command is changed to FBWF_DISABLE and the current status is not changed.
- **Commit files** : Even if the disks are protected by the **FBWF**, you can add or delete the files you want to save on them. To write the changes onto the disk, click the [**Write the changes to the disk**] button.

- **Session Status**
  - **Current session** : Displays the volumes being protected by the **FBWF** and a list of the folders and files on those volumes that are excepted from protection by the **FBWF**.
  - **Next session** : Select the volumes that will be protected by the **FBWF** when the client is booted up next time. Also, select the folders and files that you want to except from protection by the **FBWF**.

Windows Media Player

The **WES** Client includes **Windows Media Player 11**. With **Windows Media Player**, you can play audio and video files on a website.

2.3.4 Control Panel

The Windows Firewall

The Windows Firewall protects your client further. The Windows Firewall allows you to restrict incoming data to your client from other computers, thus helping to control your client data more effectively. In addition, it also provides a barrier between your client and network connections reducing unauthorized access, viruses, and worms across networks.

You can think of a firewall as a sentinel which identifies incoming data from the Internet and other networks. According to the firewall settings, incoming data to your computer is either permitted or rejected.

The Windows Firewall is, by default, installed and activated on your client. However, your administrator can turn it off. You can choose and select a different firewall. Therefore, it is not required for you to use the Windows Firewall. Estimate the functions of other firewalls and choose the best one to fit your requirements. To install and run a different firewall, you must turn off the Windows Firewall.

You must be logged on as Administrator to turn the Windows Firewall on or off. Follow these steps to turn the Windows Firewall on or off.

1. Run the Windows Firewall.
2. Click on one of these options under the General tab.
   - **On (recommended)** : This is the recommended setting for normal use.
   - **On with no exceptions** : This settings blocks all unwanted access to your client, including all requests to programs and services selected in the Exceptions tab. Use this setting when you need to protect your client to the maximum extent.

- **Off (Not recommended)** : Turning off the Windows Firewall may make your client and network more vulnerable to viruses and intruders.

2.3.5 Configuring Utilities

Local Drive

- C Drive

  The C drive is used for the system. The client OS will not operate if space available on the system drive is not sufficient. Ensure sufficient space is available on the C drive. **EWF** can help maintain available space by preventing the C drive being written to directly.

- **Saving Files**

  Your client uses a fixed size of flash memory. Therefore, it is better to save files to the server rather than to your client.

Mapping a Network Drive

The **Administrator** can map a folder to a network drive. To keep the mapping information after restarting the client, take note of these directions carefully.

- Select the **Reconnect** at logon checkbox in the **Map Network Drive** dialog box.
- If the **EWF** or **FBWF** is enabled, the changes are saved on the disk.

Installing MUI (Multi-language User Interface)

The **MUI** Setup program helps you set up languages on the **WES** client. In addition, you can delete an original language pack to extend the available free disk space. If you want to change the default language, standards or formats, use the Regional Options in the Control Panel.

To add a language to your **WES** client, follow these steps:

- Log on as an **Administrator**.
- If the **EWF** or **FBWF** is enabled, you must disable it before beginning the installation.
- Click **Start** and click **Run**. Type **muisetup.exe** in the Open box and click OK. A list of languages that can be installed is displayed as shown below. Log on as an administrator.

- Select the language you want to install and click **Install** from the **File** menu. The installation will begin. Log on as an administrator.

Multilingual User Interface Pack - SAMSUNG
File Help
Install languages
Select the language you want to install on the system for menus and dialogs.
Languages
Install
German
French
Italian
Russian
Swedish
Spanish
Note: Using Regional and Language Options in Control Panel, you can change the user interface, default keyboard, locale, and standards and formats. If deleting, the language source file will be removed and returning the disk free space.
Install
Close

You can delete an original language pack using the **Delete** menu in the **File** menu.

This operation deletes the original language pack only and does not delete the copy installed on your **WES** Client.

2.3.6 Recover the System

Overview

The WES Client provides a recovery function which allows you to revert to a backed up system when encountering a serious problem. You can back up an OS image which is working normally to USB memory or the PXE server. You can revert to a backed up image when your client has one of these problems:

- When a system file is deleted accidentally or is corrupted
- When the client computer is unstable or there is a problem with a device driver
- When problems occur, after installing a new program or device
- When the client computer is infected with a virus
- When **Windows Embedded Standard** fails to start

How to Recover the System

- Recovery Using USB Memory

  By following these steps, you can save all necessary files to USB memory, and boot up with the backed up system on the USB memory and recover the system.

  1. Perform system formatting for your USB memory in order to make it bootable.
  2. Save the **Windows Embedded Standard** image and the Backup/Recovery Utility which will be recovered later to your USB memory.
  3. Boot up with the USB memory.
  4. Recover the system using the **Windows Embedded Standard** image and the Backup/Recovery Utility in the USB memory.

- Recovery Using Network Booting

  This method is provided through the **PXE (Preboot eXecution Environment)** server. The PXE sever provides a client/server interface based on **TCP/IP**, **DHCP**, and **TFTP**. It allows an administrator at a remote location to configure and boot the operating system onto a client over a network.

  1. Implement a PXE server.
  2. Save the **Windows Embedded Standard** image and the Backup/Recovery Utility which will be recovered later onto the PXE server.
  3. Boot the client via the network.
  4. Recover the system using the Windows Embedded Standard image and the Backup/Recovery Utility saved on the PXE server via the network.

  For more information, refer to the PXE Server User Manual.

2.4 MagicRMS Pro

2.4.1 About MagicRMS Pro

The **MagicRMS Pro** program can be used to remotely control a Samsung network monitor. The design of the user-oriented interface makes it easy and convenient to use.

Using **MagicRMS Pro**, you can schedule a task to be performed at a specified time on a network monitor.

Also, you can manage multiple network monitors efficiently by grouping or filtering them according to specific conditions.

To use the **MagicRMS Pro Solution** or **MagicRMS Pro Agent** and to view the user guide, visit www.samsunglfd.com. Go to **Support**>**Download Center**, and search for **MagicRMS** to download.

> Open source license notice
>
> In the case of using open source software, Open Source licenses are available on the **MagicRMS Pro Agent**.
>
> Open Source License Notice is written only English.

3.1 Requirements Before Contacting Samsung Customer Service Center

3.1.1 Check the following.

Sound issue	
There is no sound.	Check the connection of the audio cable or adjust the volume.
	Check the volume.
The volume is too low.	Adjust the volume.
	If the volume is still low after turning it up to the maximum level, adjust the volume in the audio settings program.

4 Specifications

4.1 General

Model Name		WS-Stand
Power Supply		This product uses 100 to 240V. Refer to the label at the back of the product as the standard voltage can vary in different countries.
Server connector		LAN
USB		USB 2.0 x 6 (Down stream)
Dimensions (W x H x D) / Weight		244.0 X 316.0 X 227.0 mm / 9.6 X 12.4 X 8.9 inches / 2.0 kg / 4.41 lb
Environmental considerations	Operating	Temperature : 50°F ~ 122°F (10°C ~ 50°C) Humidity : 10 % – 90 %, non-condensing
	Storage	Temperature : -4°F ~ 113°F (-20°C ~ 45°C) Humidity : 5 % – 90 %, non-condensing
VESA (V x H)		100 x 100 mm

The above specifications are subject to change without notice to improve quality.

This device is a Class B digital apparatus.

(USA only)

Dispose unwanted electronics through an approved recycler.

To find the nearest recycling location, go to our website:

www.samsung.com/recyclingdirect or call, (877) 278 - 0799

CALIFORNIA USA ONLY (Applicable for networking models only.)

This Perchlorate warning applies only to primary CR(Manganese Dioxide) Lithium coin cells in the product sold or distributed ONLY in California USA

"Perchloate Material - special handling may apply, See www.dtsc.ca.gov/hazardouswaste/perchlorate."

4.2 Power consumption

PowerSaver	Normal operation mode	Power saving mode	Power off (Power button off)	Power off (Power switch off)
Power lamp	On	Off	Off	Off
Power Consumption	Less than 30 W	Less than 1.8 W	Less than 1.8 W	0 W

- The power consumption level can vary in different operating conditions or when settings are changed.
- To reduce the power consumption to 0 watts, turn off the switch on the adapter or disconnect the power cable. Be sure to disconnect the power cable when you will not be using the product for an extended period of time. To reduce the power consumption to 0 watts when the power switch is not available, disconnect the power cable.

Contact SAMSUNG WORLD WIDE

If you have any questions or comments relating to Samsung products, please contact the SAMSUNG customer care center.

NORTH AMERICA		
U.S.A	1-800-SAMSUNG (726-7864)	http://www.samsung.com
CANADA	1-800-SAMSUNG (726-7864)	http://www.samsung.com/ca (English) http://www.samsung.com/ca_fr (French)
MEXICO	01-800-SAMSUNG (726-7864)	http://www.samsung.com

LATIN AMERICA		
ARGENTINE	0800-333-3733	http://www.samsung.com
BOLIVIA	800-10-7260	http://www.samsung.com
BRAZIL	0800-124-421 4004-0000	http://www.samsung.com
CHILE	800-SAMSUNG (726-7864) From mobile 02-482 82 00	http://www.samsung.com
COLOMBIA	01-8000112112	http://www.samsung.com
COSTA RICA	0-800-507-7267	http://www.samsung.com/latin (Spanish) http://www.samsung.com/latin_en (English)
DOMINICA	1-800-751-2676	http://www.samsung.com/latin (Spanish) http://www.samsung.com/latin_en (English)
ECUADOR	1-800-10-7267	http://www.samsung.com/latin (Spanish) http://www.samsung.com/latin_en (English)
EL SALVADOR	800-6225	http://www.samsung.com/latin (Spanish) http://www.samsung.com/latin_en (English)

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HONDURAS	800-27919267	http://www.samsung.com/latin (Spanish) http://www.samsung.com/latin_en (English)
JAMAICA	1-800-234-7267	http://www.samsung.com
NICARAGUA	00-1800-5077267	http://www.samsung.com/latin (Spanish) http://www.samsung.com/latin_en (English)
PANAMA	800-7267	http://www.samsung.com/latin (Spanish) http://www.samsung.com/latin_en (English)
PERU	0-800-777-08	http://www.samsung.com
PUERTO RICO	1-800-682-3180	http://www.samsung.com
TRINIDAD & TOBAGO	1-800-SAMSUNG (726-7864)	http://www.samsung.com
VENEZUELA	0-800-100-5303	http://www.samsung.com

EUROPE		
AUSTRIA	0810 - SAMSUNG (7267864, € 0.07/min)	http://www.samsung.com
BELGIUM	02-201-24-18	http://www.samsung.com/be (Dutch) http://www.samsung.com/be_fr (French)
BOSNIA	05 133 1999	http://www.samsung.com
BULGARIA	07001 33 11 , normal tariff	http://www.samsung.com
CROATIA	062 SAMSUNG (062 726 7864)	http://www.samsung.com
CYPRUS	8009 4000 only from landline (+30) 210 6897691 from mobile and land line	http://www.samsung.com

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FRANCE	01 48 63 00 00	http://www.samsung.com
GERMANY	0180 5 SAMSUNG bzw. 0180 5 7267864* (*0,14 €/Min. aus dem dt. Festnetz, aus dem Mobilfunk max. 0,42 €/Min.)	http://www.samsung.com
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UGANDA	0800 300 300	http://www.samsung.com
ZAMBIA	211350370	http://www.samsung.com

Correct Disposal

Correct Disposal of This Product (Waste Electrical & Electronic Equipment)

(Applicable in countries with separate collection systems)

This marking on the product, accessories or literature indicates that the product and its electronic accessories (e.g. charger, headset, USB cable) should not be disposed of with other household waste at the end of their working life. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate these items from other types of waste and recycle them responsibly to promote the sustainable reuse of material resources.

Household users should contact either the retailer where they purchased this product, or their local government office, for details of where and how they can take these items for environmentally safe recycling.

Business users should contact their supplier and check the terms and conditions of the purchase contract. This product and its electronic accessories should not be mixed with other commercial wastes for disposal.

Correct disposal of batteries in this product

(Applicable in countries with separate collection systems)

The marking on the battery, manual or packaging indicates that the battery in this product should not be disposed of with other household waste. Where marked, the chemical symbols Hg, Cd or Pb indicate that the battery contains mercury, cadmium or lead above the reference levels in EC Directive 2006/66.

The battery incorporated in this product is not user replaceable. For information on its replacement, please contact your service provider. Do not attempt to remove the battery or dispose it in a fire. Do not disassemble, crush, or puncture the battery. If you intend to discard the product, the waste collection site will take the appropriate measures for the recycling and treatment of the product, including the battery.

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